

TWO NEW SPECIES OF *ARENARIA* (CARYOPHYLLACEAE) FROM MEXICO

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ABSTRACT

Two new Mexican species of *Arenaria* are described and illustrated: *A. hintoniorum* B. Turner, a bizarre localized gypsophile from near Galeana, Nuevo León, and *A. tequilana* B. Turner from Volcán Tequila, Jalisco.

KEY WORDS: *Arenaria*, Caryophyllaceae, México

Routine identification of Mexican plants has revealed the following novelties.

Arenaria hintoniorum B. Turner, *sp. nov.* Fig. 1. TYPE: MEXICO. Nuevo León: Mpio. Galeana, W of San Roberto, gypsum hillsides, 2210 m, 14 May 1991, *G.B. Hinton et al. 20957* (HOLOTYPE: TEX).

Arenariae lycopodioidi Schlecht. similis sed differt caulibus strictis et foliis valde decussatis ciliatis succulentisque.

Perennial, stiffly erect, suffruticose herbs 3-10 cm high. Stems densely hispidulous with retrorse hairs, the internodes short, mostly 1-5 mm long. Leaves opposite throughout, seemingly succulent, markedly decussate, linear-oblongate, semiplicate, those at midstem 3-4 mm long, 0.5-1.0 mm wide, hirsute-puberulous, especially along the margins, the apices acute to rounded, often apiculate. Flowers single, the peduncles 2-4 mm long. Sepals 5, elliptic, 2.5-3.5 mm long, pubescent like the leaves, the margins scarios. Petals 5, ovate, entire, white, 3-4 mm long, the apices broadly obtuse to rounded. Stamens 10, ca. 5 mm long, the anthers whitish-yellow, ca. 0.5 mm long. Styles 3, separate. Capsules (old and abortive) with 6 valves. Seeds not examined.

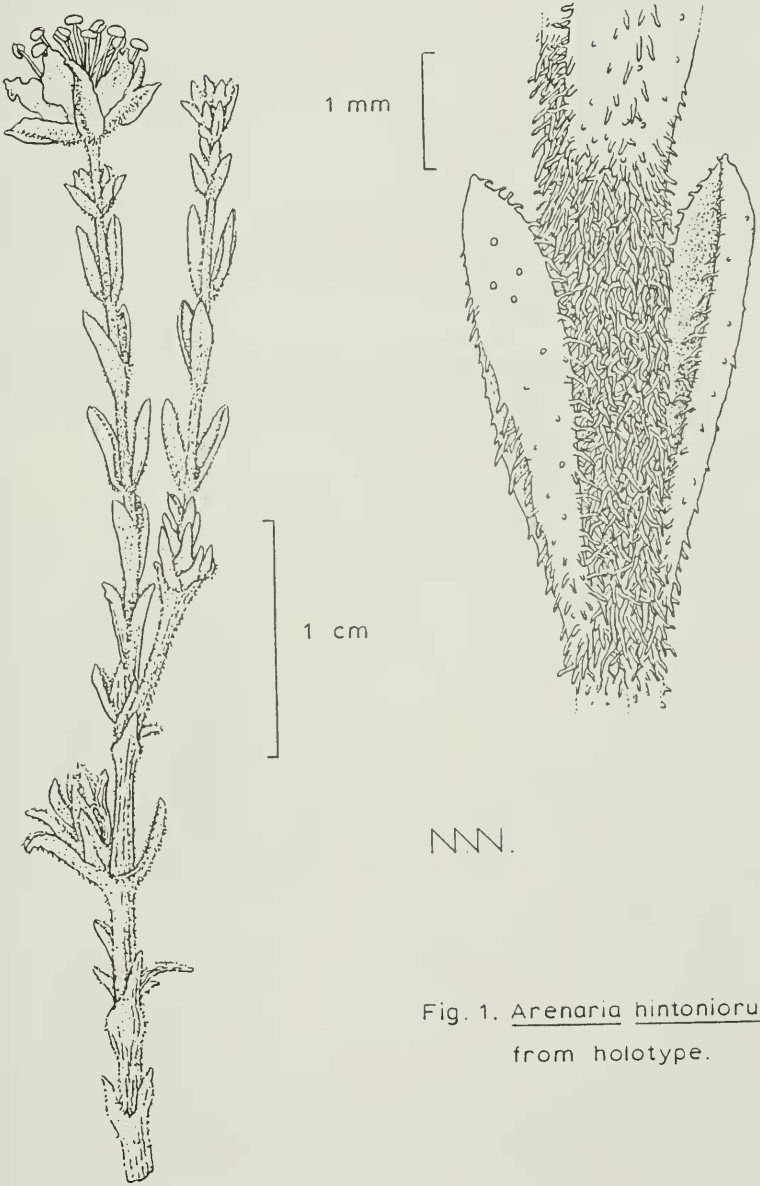


Fig. 1. *Arenaria hintoniorum*,
from holotype.

This taxon is not like any other known to the present author. It appears to be a localized gypsum endemic, having a dwarf, suffruticose, subsucculent habit, with relationships to *Arenaria lycopodioides*.

Arenaria hintoniorum comes from an area where numerous localized, rather bizarre, gypsophilic endemics occur, many of these first collected by the remarkable Hinton family (cf. protologue of *Perymenium hintoniorum* B. Turner, *Phytologia* 71:315. 1991.).

Arenaria tequilana B. Turner, *sp. nov.* Fig. 2. TYPE: MEXICO. Jalisco: Top of Volcán Tequila, 14 Jan 1990, 2900 m, *M. Chazaro B. et al. 6176* (HOLOTYPE: TEX!; Isotypes: GUADA,WIS).

Arenaria lanuginosa (Michx.) Rohrb. similis sed differt floribus minoribus (2.5-3.0 mm longis) numerosioribusque in inflorescentia terminali cymosi-paniculata dispositis et seminibus cristis tuberculorum pusillorum distincte ornatis.

Perennial erect or sprawling herbs to 18 cm high. Stems pubescent in lines with minute recurved strigose hairs to glabrate. Leaves linear-lanceolate, mostly 8-22 mm long, 0.8-1.1 mm wide, uninervate, glabrous or ciliate at the base, the apices narrowly acute. Flowers numerous, arranged in terminal corymbose panicles, the ultimate slender peduncles mostly 5-15 mm long. Sepals 5, 2.5-3.0 mm long, ca. 1 mm wide, glabrous, weakly uninervate, somewhat purplish carinate, the apices acute. Petals 5, ovate, white, 2-3 mm long, the apices more or less lacerate or weakly lobed. Anthers 10. Ovary ovoid; styles 3, separate. Capsules ovoid, 6 valvate, the seeds black, subreniform, ca. 1 mm long, 0.8 mm wide, the dorsal margins with distinct ornamented ridges of low tuberculae, the lateral surfaces shiny and weakly ornamented.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Jalisco: "Volcán Tequila, along road to microwave station, oak forest interspersed with pine to 9000 ft (pines alone reaching top of plug at 9800 ft)" 23 Oct 1970, *Webster & Breckon 15840* (TEX).

Both of the above cited specimens note the species to be "abundant" or "common" near the top of the Tequila volcano. The type label describes the taxon as "annual" but the plant itself appears to possess slender, branched, rhizomes.

The numerous small flowers, arranged in an open cymose, bracteate, panicle readily distinguish this taxon from its presumptive closest relative, *Arenaria lanuginosa* ssp. *saxosa* (A. Gray) Maguire (*sensu* Maguire, *Amer. Midland Naturalist* 48:498. 1951.), a widespread and common taxon at lower elevations throughout most of México. The ornamented seeds of *A. tequilana*

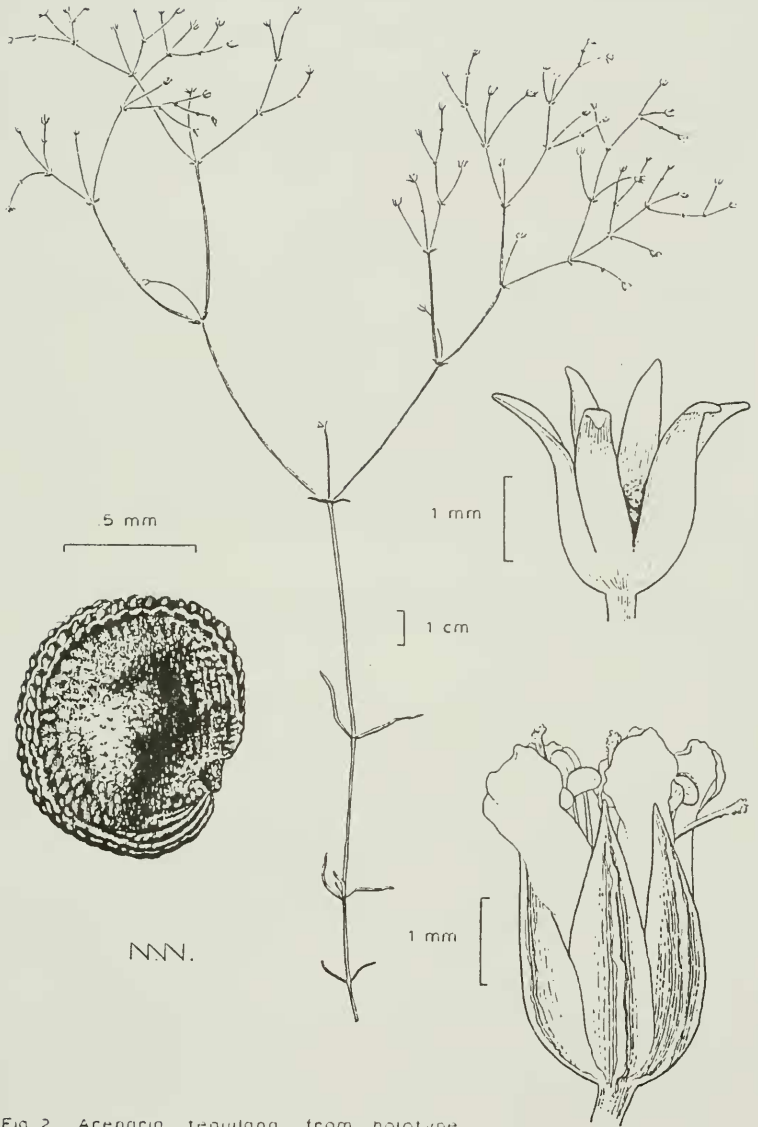


Fig 2 *Arenaria tequilana*, from holotype.

also distinguish the species from *A. lanuginosa*, which produces somewhat smaller, smooth seeds.

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